A NEW SPECIES OF CANCELLARIA (MOLLUSCA: CANCELLARIIDAE) FROM THE NORTHERN GULF OF MEXICO

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Abstract.—A previously unknown species of Cancellariidae, Cancellaria rosewateri, is described. This new species, from the northern Gulf of Mexico, is unlike any previously known from the Caribbean, and subgeneric placement is not possible as there are no closely related species with which it may be grouped. Comparisons are made with a species from the Miocene of California and with the Indo-Pacific genus Merica.

During examination of material dredged by the R/V *Oregon* in 1962, two specimens of a unique new deep-water cancellariid were discovered. Subgeneric placement of this new species, *Cancellaria rosewateri*, is not attempted as there seem to be no closely related species. Comparison with the Indo-Pacific taxon *Merica* is made under the discussion below. The R/V *Oregon* also obtained at a nearby station a specimen of *Gerdiella cingulata* Olsson & Bayer, 1972. *Gerdiella* is unknown in the Tertiary of the Caribbean and Panamic areas, but is very similar to, if not the same as, *Mericella* Thiele, 1929, from the western Indian Ocean.

Class Gastropoda
Order Caenogastropoda
Superfamily Cancellariacea Ponder
Family Cancellariidae Forbes & Hanley
Cancellaria Lamarck

Cancellaria Lamarck, 1799: 71.

Type-species.—Voluta reticulata Linné, 1767, by monotypy.

Cancellaria rosewateri, new species Fig. 1

Material examined.—Holotype: Length 29.3 mm, width 18.6 mm, R/V Oregon Station 4156, depth, 200 fathoms, 90 miles SSE of Pascagoula, Mississippi, 29°08′N, 88°18′W, 19 December 1962, USNM 811465. Paratype: Length 30.4 mm, width 18.8 mm, R/V Oregon Station 4154, 200 fathoms, 95 miles SSE of Mobile, Alabama, 29°17′N, 87°39′W, 18 December 1962, USNM 811464.

Shell description.—Nucleus eroded but apparently smooth, naticoid, of about 1½ whorls. Postnuclear whorls, about 5 in number, rounded, with small but distinct shoulder behind which lies a sutural channel. Shell thin but solid, slightly translucent, with sculpture of evenly spaced smooth spiral cords, about 16 on body whorl with about 8 visible on penultimate whorl and spire whorls. Both spiral cords and their interspaces devoid of axial sculpture except for fine growth lines. Aperture ovate. Columella concave with 3 almost equal folds, anterior one forming edge of short, shallow anterior canal. Inside of aperture lirate, lirations

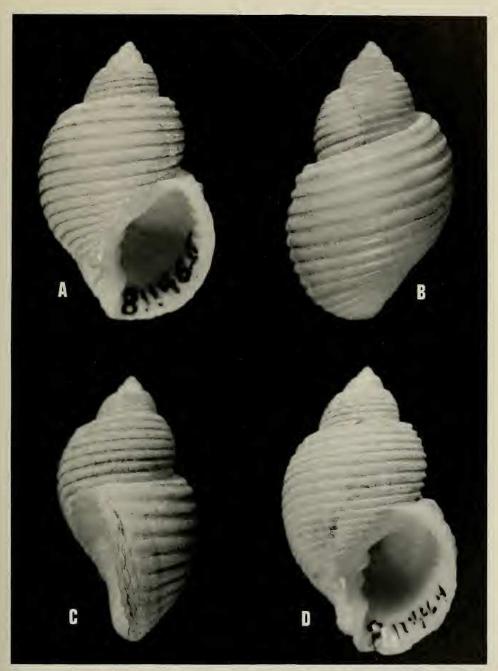


Fig. 1. Cancellaria rosewateri: A, B, C, Holotype (USNM 811465), 29.3×18.6 mm; D, Paratype (USNM 811464), 30.4×18.8 mm.

seeming to match external spiral cords, and extending well into aperture. Shell horn-colored, suffused with light brown arranged in 2 indistinct spiral bands, the widest occupying posterior half of body whorl, and the other the center third of anterior half. Periostracum brown, but not describable from remaining traces.

Type-locality.—200 fathoms, 90 miles SSE of Pascagoula, Mississippi (R/V Oregon Station 4156)

Distribution.—At present known only from the type-locality and nearby R/V Oregon Station 4154.

Etymology.—Named for Dr. Joseph Rosewater, Curator, Division of Mollusks, National Museum of Natural History, Smithsonian Institution, in recognition of his contributions to malacology and in appreciation of the assistance he has given me over a period of many years. Dr. Rosewater was also the first to recognize this species as new and kindly made the specimens available for study and description.

Discussion.—Comparison of Cancellaria rosewateri with Caribbean and Panamic species is difficult as there are no known species, Recent or Tertiary, which are similar. Cancellaria obtusa Deshayes, 1830, of the Panamic-Pacific Province, has similar sculpture but has a straighter columella with unequal plications. Cancellaria darwini Petit, 1970, from the Galapagos Islands, has sculpture that is primarily spiral but possesses a straight columella. The shape of the aperture and the columella of Cancellaria rosewateri closely resemble those features in species of the Indo-Pacific genus Merica. Species of Merica also have spiral sculpture, but not in the form of smooth bands as on C. rosewateri. Also, the outer lip of Merica is markedly prosocline with a distinct stromboid notch. In C. rosewateri the outer lip is only slightly prosocline and lacks any evidence of a stromboid notch. Cancellaria rosewateri has many characters in common with C. dalli (Anderson & Martin, 1914) as figured by Addicott (1970:117, pl. 15, figs. 11-13, 23, 27), but that species is described as having two columellar folds. Some European Tertiary cancellariids have been placed in Merica by various authors but it is doubtful that any of these are congeneric with the Indo-Pacific type.

Literature Cited

Addicott, W. O. 1970. Miocene gastropods and biostratigraphy of the Kern River Area, California.— United States Geological Survey Professional Paper 642:1–174, pls. 1–21.

Deshayes, G. P. 1830. Encyclopédie Méthodique. Histoire naturelle des vers 2(1):1-256. Paris.

Lamarck, J. B. P. A. 1799. Prodrome d'une nouvelle classification des coquilles. . . .—Société d'Histoire Naturelle de Paris, Mémoires:63-91.

Linné, C. von. 1767. Systema naturae per regna tria naturae edition duodecimo reformata. Vol. 1, pt. 2. Stockholm.

Olsson A. A., and F. M. Bayer. 1972. *Gerdiella*, a new genus of deep-water cancellariids.—Bulletin of Marine Science 22(4):875–880.

Petit, R. E. 1970. Notes on Cancellariidae (Mollusca: Gastropoda)—II.—Tulane Studies in Geology and Paleontology 8(2):83–88, pl. 1.

Ponder, W. F. 1973. The origin and evolution of the Neogastropoda.—Malacologia 12(2):295-338. Thiele, J. 1929. Handbuch der systematischen Weichtierkunde.—Jena, Gustav Fischer, 1929-1935. 1154 pp.

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